

**GOVERNOR'S OFFICE OF HIGHWAY SAFETY &
ARIZONA PROSECUTING ATTORNEYS' ADVISORY COUNCIL**

Present

2017 Advanced DUI Seminar

September 20-22, 2017

Phoenix, Arizona



**RECENT CANNABIS STUDIES &
HOW TO USE THEM**

Presented by:

Bill Burke

Tempe City Prosecutor

Distributed by:

ARIZONA PROSECUTING ATTORNEYS' ADVISORY COUNCIL

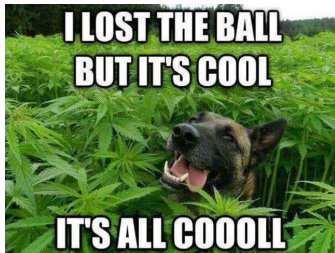
1951 West Camelback Road, Suite 202

Phoenix, Arizona 85015

ELIZABETH ORTIZ

EXECUTIVE DIRECTOR

Marijuana DUI Recent Studies



Why Do We Need to Know the Studies?

- ▶ You need to understand marijuana impairment and be confident in your understanding to convince a jury
- ▶ May need to use studies in motions in limine, pre-trial motions
- ▶ Need to be aware to effectively communicate with your criminalist and DRE

Marijuana

- ▶ Cannabis Sativa plant
 - THC: delta-9-tetrahydrocannabinol
 - Active parent drug
 - n-Hydroxy-THC
 - Active metabolite
 - N-nor-9-Carboxy-THC
 - Inactive metabolite

NHTSA Marijuana-Impaired Driving, A Report to Congress July, 2017

Marijuana characteristics

- ▶ Fat soluble
- ▶ THC detectable w/i 1 min of smoking
- ▶ THC levels decline exponentially
- ▶ Peaks at end of smoking or very soon after
- ▶ THC levels drop rapidly, then slows over time
- ▶ THC may still be in the brain while undetectable in blood

Recent Studies

- ▶ NHTSA Marijuana-Impaired Driving, A Report to Congress July, 2017
 - Impairment observed 2-3 hours after smoking, but THC levels decline 80%-90% after one hour
 - No agreed upon impairment standards for THC, THC levels are not an accurate measure of impairment
 - Available research does not support the development of psychomotor, behavioral or cognitive test that would be practical or feasible for law enforcement use at this time. Need to keep researching

Recent Studies con't

- ▶ NHTSA Marijuana-Impaired Driving, A Report to Congress
 - Prevalence of Alcohol declined from 2007 to 2014, while THC increased
 - Studies regarding crash risk vary
 - Marijuana does impair driving related skills such as cognitive performance and judgement, but again not tied to a specific THC level

Recent Studies con't

- ▶ NHTSA Marijuana-Impaired Driving, A Report to Congress – Recommendations
 - Continue training officers (ARIDE, DRE)
 - Continue research on effects of THC, develop a field test for law enforcement that would indicate impairment by THC
 - Improve data collection by states regarding the prevalence and effects of marijuana-impaired driving

General Study Findings

- ▶ It is not safe to drive under the influence of marijuana
 - Can impair cognitive, memory and psycho-motor performance
- ▶ Study of Cannabis effects on pilot performance
- ▶ Users not a good judge of their own impairment
- ▶ Marijuana impairment can last a long time

General Studies con't

- ▶ Its not practical to have a THC limit for driving impairment – why? THC limit is not a good indicator of impairment
- ▶ Blood concentration under-represents impairment
- ▶ THC levels in blood decline rapidly, but impairment remains
- ▶ FST's are not very good at determining marijuana impairment
- ▶ BUT DRE exam, officer observations are key to proving impairment!
